



1. (Canceled).
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled).
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled).
14. (Canceled)

15. An isolated peptide, comprising

LVVGLCT(Xaa1)QIKTGPAC(Xaa2) (SEQ ID NO:1),

wherein

when Xaa1 comprises C, G or P, Xaa2 is absent or R;  
when Xaa1 comprises C, Xaa2 is absent; and  
when Xaa1 comprises either G or P, Xaa2 comprises R.

16. The isolated peptide of claim 15, comprising SEQ ID NO: 8.
17. The isolated peptide of claim 15, comprising SEQ ID NO: 9.
18. The isolated peptide of claim 15, further comprising one or more peptides of

SEQ ID NOS: 2, 3, 4, 5, 6 or 7.

19. A composition, comprising the peptide of claim 15, and a carrier.
20. An assay for the diagnosis of schizophrenia in an individual, comprising  
obtaining a sample from an individual comprising a blood sample, or a fraction  
comprising platelets or platelet-associated antibodies (PAA) shed from the platelets;  
contacting the sample with the peptide of claim 15;  
determining the level of binding of the peptide to the sample; and

compare the binding level of the sample with that of a non-schizophrenic individual(s), wherein a binding level of the individual's sample higher than that of the non-schizophrenic individual(s) indicates that the individual has a high likelihood of being afflicted with schizophrenia.

21. The assay of claim 20, wherein the individual's sample comprises whole blood.

22. The assay of claim 20, wherein the peptide comprises SEQ ID NO: 8.

23. The assay of claim 20, wherein the peptide comprises SEQ ID NO: 9.

24. A kit for diagnosing schizophrenia, comprising  
a support comprising one or more of the isolated peptides of claim 15 immobilized thereon;

an anti-human immunoglobulin antibody or functional fragment thereof, optionally conjugated to a detectable marker;

reagent(s) required for carrying out the assay; and

instructions for use of the kit.

25. The kit of claim 24, wherein the peptide comprises SEQ ID NO: 8.

26. The kit of claim 24, wherein the peptide comprises SEQ ID NO: 9.

27. An isolated peptide, comprising SEQ ID NO: 3.

28. The isolated peptide of claim 27, further comprising one or more peptides of SEQ ID NOS: 2, 4, 5, 6, 7, 8 or 9.

29. A composition, comprising the isolated peptide of claim 27, and a carrier.

30. An assay for the diagnosis of schizophrenia in an individual, comprising  
obtaining a sample from an individual comprising a blood sample, or a fraction comprising platelets or platelet-associated antibodies (PAA) shed from the platelets;

contacting the sample with the peptide of claim 27;

determining the level of binding of the peptide to the sample; and

compare the binding level of the sample with that of a non-schizophrenic individual(s), wherein a binding level of the individual's sample higher than that of the non-schizophrenic individual(s) indicates that the individual has a high likelihood of being afflicted with schizophrenia.

31. A kit for diagnosing schizophrenia, comprising

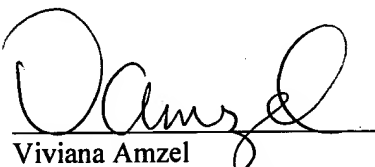
a support comprising the isolated peptide of claim 27, immobilized thereon;  
an anti-human immunoglobulin antibody or functional fragment thereof conjugated to a detectable marker;  
reagent(s) required for carrying out the assay; and  
instructions for use of the kit.

**GENERAL REMARKS**

None of the cited references disclose or suggest the claimed peptides, composition, assay or kit thereof. The claimed subject matter is believed to be novel and patentably distinguishable over the prior art of record. Reconsideration and withdrawal of all rejections as they may pertain to claims 15-31 is requested. This application is considered to be in condition for allowance. Prompt notice to this respect is solicited by the applicant.

Respectfully submitted,  
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Date: June 24, 2005  
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